

Amendments to the Claims



This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1-20 (Cancelled)

21. (Currently Amended) A recording and reproducing device recording and reproducing specific digital content data, comprising:

a program storage unit operable to store a control program for controlling the recording and reproducing device,

a detecting unit operable to detect whether or not an abuse of ~~[[a]]~~ the control program ~~controlling~~ has occurred while the recording and reproducing device is powered off; and

a revoking unit operable to halt the use of the recording and reproducing device based on the abuse detected by the detecting unit, wherein

the detecting unit comprises:

an abuse prevention information calculating unit operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by means of the control program controlling the recording and reproducing device and a specific function performing a specific function on the control program stored in the program storage unit, and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit;

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit; and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device ~~recalculated by the abuse prevention information calculating unit by means of the control program and the specific function~~, and then judging the abuse based on the comparing result.

22. (Cancelled)

23. (Cancelled)

24. (Currently Amended) A recording and reproducing device according to claim 21, wherein the abuse prevention information storage unit is different from ~~[[a]]~~ the program storage unit storing the control program.

25. (Previously Presented) A recording and reproducing device according to claim 21, wherein

the abuse prevention information calculating unit calculates and stores the first abuse prevention information in the abuse prevention information storage unit when the control program is updated, and

the comparing unit compares the first abuse prevention information stored at the update of the control program and the second abuse prevention information recalculated by the abuse prevention information calculating unit.

26. (Previously Presented) A recording and reproducing device according to claim 21, wherein at the time of detecting the abuse of the control program, the detecting unit sends the detecting result to a specific abuse detecting server.

27. (Previously Presented) A recording and reproducing device according to claim 26, wherein the detecting unit further sends a unique ID specifying the recording and reproducing device to the specific abuse detecting server.

28. (Previously Presented) A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from the detecting unit.

29. (Previously Presented) A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from a specific abuse detecting server.

30. (Previously Presented) A recording and reproducing device according to claim 21, wherein the revoking unit halts the use of the recording and reproducing device on the basis of an instruction sent from a broadcast station.

31. (Previously Presented) A recording and reproducing device according to any one of claims 28-30, wherein the revoking unit dissolves the halt of the use of the recording and reproducing device on the basis of a specific instruction.

32. (Currently Amended) A control method of controlling a recording and reproducing device recording and reproducing specific digital content data, the method comprising the steps of:

storing a control program for controlling the recording and reproduction device;

detecting whether or not an abuse of [[a]] the control program ~~controlling~~ has occurred while the recording and reproducing device is powered off; and

halting the use of the recording and reproducing device based on the abuse detected by the step of detecting the abuse, wherein

the detecting step includes:

calculating first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored means of the control program controlling the recording and reproducing device and a specific function;

calculating second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored;

storing the first abuse prevention information calculated ~~by the calculating step~~; and

comparing, if necessary, the first abuse prevention information stored and the second abuse prevention information calculated at the time of power on the device ~~recalculated by the~~

~~calculating step by means of the control program and the specific function, and then judging the abuse based on the comparing result, wherein~~

~~the calculating step includes calculating and storing the first abuse prevention information at the time of power-off of the recording and reproducing device, and~~

~~the comparing step includes comparing the first abuse prevention information stored at the power-off of the recording and reproducing device and the second abuse prevention information recalculated by the calculating step.~~

33. (Currently Amended) A computer program product storing a program, when executed, causing a computer controlling a recording and reproducing device recording and reproducing specific digital content data, to perform the steps of:

storing a control program controlling the recording and reproducing device;

detecting whether or not an abuse of [[a]] the control program controlling has occurred while the recording and reproducing device is powered off; and

halting the use of the recording and reproducing device based on the abuse detected by the step of detecting the abuse, wherein

the detecting step includes:

calculating first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program stored in the program storage unit means of the control program controlling the recording and reproducing device and a specific function;

calculating second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored;

storing the first abuse prevention information calculated ~~by the calculating step~~; and
comparing, if necessary, the first abuse prevention information stored and the second
abuse prevention information calculated at the time of powering on the device ~~recalculated by~~
~~the calculating step by means of the control program and the specific function~~, and then judging
the abuse based on the comparing result, ~~wherein~~

~~the calculating step includes calculating and storing the first abuse prevention~~
~~information at the time of power off of the recording and reproducing device, and~~

~~the comparing step includes comparing the first abuse prevention information stored at~~
~~the power off of the recording and reproducing device and the second abuse prevention~~
~~information recalculated by the calculating step.~~

34. (Currently Amended) A computer readable storage medium storing a program,
when executed, causing a computer controlling a recording and reproducing device recording
and reproducing specific digital content data, to perform the steps of:

storing a control program controlling the recording and reproducing device;

detecting whether or not an abuse of ~~[[a]]~~ the control program controlling has occurred
while the recording and reproducing device is powered off; and

halting the use of the recording and reproducing device based on the abuse detected by
the step of detecting the abuse, wherein

the detecting step includes:

calculating first abuse prevention information at the time of powering off the recording
and reproducing device, by performing a specific function on the control program stored in the

program storage unit means of the control program controlling the recording and reproducing device and a specific function;

calculating second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program stored in the program storage unit;

storing the first abuse prevention information calculated ~~by the calculating step~~; and
comparing, if necessary, the first abuse prevention information stored and the second abuse prevention information calculated at the time of powering on the device ~~recalculated by the calculating step by means of the control program and the specific function~~, and then judging the abuse based on the comparing result, ~~wherein~~

~~the calculating step includes calculating and storing the first abuse prevention information at the time of power off of the recording and reproducing device, and~~

~~the comparing step includes comparing the first abuse prevention information stored at the power off of the recording and reproducing device and the second abuse prevention information recalculated by the calculating step.~~

35. (Currently Amended) An abuse detecting device configured to detect an abuse of a control program for controlling ~~provided to~~ a recording and reproducing device recording and reproducing specific digital content data, the abuse detecting device comprising:

an abuse prevention information calculating unit operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program, and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program
~~means of a control program controlling the recording and reproducing device and a specific function;~~

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit; and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device ~~recalculated by the abuse prevention information calculating unit by means of the control program and the specific function~~, and then judging the abuse based on the comparing result, ~~wherein~~

~~the abuse prevention information calculating unit calculates and stores the first abuse prevention information in the abuse prevention information storage unit at the time of power-off of the recording and reproducing device, and~~

~~the comparing unit compares the first abuse prevention information stored at the power-off of the recording and reproducing device and the second abuse prevention information recalculated by the abuse prevention information calculating unit.~~

36. (Currently Amended) An abuse prevention system including a recording and reproducing device recording and reproducing specific digital content data,

wherein the recording and reproducing device comprises:

a program storage unit operable to store a control program for controlling the recording and reproducing device;

a detecting unit operable to detect whether or not an abuse of ~~[[a]]~~ the control program has occurred while the recording and reproducing device is powered off ~~controlling the recording and reproducing device;~~

a sending unit operable to send a notice of abuse to a specific abuse detecting server when the abuse is detected; and

a revoking unit operable to halt the use of the recording and reproducing device on the basis of an instruction sent from the abuse detecting server, and

wherein the abuse detecting server, in response to the abuse notice sent from the recording and reproducing device, sends the instruction to halt the use of the recording and reproducing device to the recording and reproducing device,

wherein the detecting unit comprises:

an abuse prevention information calculating unit operable to calculate

a) first abuse prevention information at the time of powering off the recording and reproducing device, by performing a specific function on the control program, and

b) second abuse prevention information at the time of powering on the recording and reproducing device, by performing the specific function on the control program ~~means of a control program controlling the recording and reproducing device and a specific function;~~

an abuse prevention information storage unit for storing the first abuse prevention information calculated by the abuse prevention information calculating unit; and

a comparing unit operable to compare, if necessary, the first abuse prevention information stored in the abuse prevention information storage unit and the second abuse prevention information calculated at the time of powering on the device ~~recalculated by the~~

~~abuse prevention information calculating unit by means of the control program and the specific function, and then judging the abuse based on the comparing result, wherein~~

~~the abuse prevention information calculating unit calculates and stores the first abuse prevention information in the abuse prevention information storage unit at the time of power-off of the recording and reproducing device, and~~

~~the comparing unit compares the first abuse prevention information stored at the power-off of the recording and reproducing device and the second abuse prevention information recalculated by the abuse prevention information calculating unit.~~

37. (Not Entered) A recording and reproducing device recording and reproducing specific digital content data, comprising:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device;

a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit; and

a revoking unit operable to enable to operate the recording and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within a specific period, and, if no control instruction, operable to halt the use of the recording and reproducing device after operating the recording and reproducing device for the specific period, wherein

the control instruction is sent from the abuse detecting server in response to the notice of no abuse.

38. (Not Entered) An abuse prevention system including a recording and reproducing device recording and reproducing specific digital content data,

wherein the recording and reproducing device comprises:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device;

a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit; and

a revoking unit operable to enable to operate the recording and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within the specific period, and, if no control instruction, operable to halt the use of the recording and reproducing device after operating the recording and reproducing device for the specific period, and

wherein the abuse detecting server, in response to the notice of no abuse sent from the recording and reproducing device, sends the instruction to permit the use of the recording and reproducing device for the specific period, and

the control instruction is sent from the abuse detecting server in response to the notice of no abuse.

39. (New) A recording and reproducing device recording and reproducing specific digital content data, comprising:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device;

a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit; and

a revoking unit operable to enable to operate the recoding and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within a specific period, and, if no control instruction, operable to halt the use of the recording and reproducing device after operating the recording and reproducing device for the specific period, wherein

the control instruction is sent from the abuse detecting server in response to the notice of no abuse.

40. (New) An abuse prevention system including a recording and reproducing device recording and reproducing specific digital content data,

wherein the recording and reproducing device comprises:

a detecting unit operable to detect an abuse of a control program controlling the recording and reproducing device;

a sending unit operable to send in specific time intervals to a specific abuse detecting server a notice of no abuse detected by the detecting unit; and

a revoking unit operable to enable to operate the recoding and reproducing device for a specific period on the basis of a control instruction to permit the use of the recording and reproducing device within the specific period, and, if no control instruction, operable to halt the use of the recording and reproducing device after operating the recording and reproducing device for the specific period, and

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wherein the abuse detecting server, in response to the notice of no abuse sent from the recording and reproducing device, sends the instruction to permit the use of the recording and reproducing device for the specific period, and

the control instruction is sent from the abuse detecting server in response to the notice of no abuse.